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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/464,784	12/17/1999	MICHAEL B. FREEMAN	COS99034	8064

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WORLDCOM, INC.
TECHNOLOGY LAW DEPARTMENT
1133 19TH STREET NW
WASHINGTON, DC 20036

EXAMINER

CHOW, CHARLES CHIANG

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 07/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/464,784

Applicant(s)

FREEMAN ET AL.

Examiner

Charles Chow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

***Office Action for
Applicant's Amendment
(5/5/2003)***

1. Regarding applicant's amendment based on the no teachings for: the co-carrier for accessing billing; network processor for polling gateway to collect call billing data; the second data structure having default values, counter block sequence number, in header/trailer; the ground of rejection has been changed to include Cameron et al. (US 6,317,490 B1) and Cauffman et al. (US 5,325,290) for claims 32-35.

Regarding co-carrier for accessing billing, Cameron et al. (also as Cameron in below) teaches the billing administrators for access billing information in a telecomm. system (title, abstract, figure in cover page), the system has telecommunication networks, administration interface, and the user interface, for authorization from telecomm. network 12, via network interface 500, as the gateway. Cameron teaches the co-carrier as shown in col. 2, line 61 to col. 3, line 22), as the inter-exchange carrier, local-exchange carrier. Besides, Olsen et al. (also as Olsen in below) teaches the co-carrier in abstract, as the more of the participating telephone companies, for billing system.

Regarding the network processor for polling gateway to collect billing data of the calls, Cameron teaches the network interface coupled to a telecommunications network, the network interface permitting the billing administrator to poll the telecomm. network for access for billing information data from repository (col. 7, lines 16-44; col. 7, lines 37-44; col. 9, lines 51-58; col. 9, line 24 to col. 10, line 9). Cameron teaches the network interface

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for placing request for real time updating billing information from telecomm. network, such that billing administrator can track the billing information by accessing real time billing information (col. 1, lines 18-37).

Regarding the second data structure having default values, counter block sequence number, in header/trailer, Cauffman et al. (also as Cauffman in below) teaches record index, block count, row length, pointers for billing records, as shown in Fig. 39-43, col. 33, line 12 to col. 34, line 12; col., 40, line 41 to col. 41, line 19), for the pointer to 4th CDR in Fig. 42; the record 1 in CDR index in Fig. 43; the block six, low length L2, Begin Ptr B1/B2, the End Ptr E1/E2 in Fig. 46, as the block counter sequence number in the header/trailer. Cauffman teaches the for the reprocessing the billing records with indices for enabling rapid sorting (abstract), such the billing process could be efficient.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brouckman et al. (US 6,134,307) in view of Heindel et al. (US 6,304,857B1), and further in view of Walker et al. (US 5,949,875) and Ganesan et al. (US 6,055,567).

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(For a clearer disclosure of the co-carrier for accessing billing, referring to Cameron in claim 32 below).

Regarding **claim 1**, Brouckman discloses, an apparatus (network 100) for managing call records (abstract, front figure) in the signaling network (Fig. 3, gateway 110, the MSC 310) to carry and convert user call events (abstract, col. 1, summary of the invention). The gateway (110) interfaces with the signaling network (MSC 310, PSTN 31), the internet service provider as shown in col. 7, line 56-col. 8, line 2, the SPnet 524 is a personal computer for internet, Web services.

Brouckman discloses the operative to collect billing data from signaling network in the first data structure format (from plurality of sources, col. 10, line 52-53); and a network processor operative to receive the call billing record (front figure, the BSS 430 receives CDRs from gateway 110; the CRD is created in the gateway in the network processor element and extracted by the operations maintenance controller gateway 502, col. 4, line 35-42).

Brouckman discloses the receiving the collected call billing data (collection process, col. 4, line 35) in the first format (receiving plurality of call events fro plurality of source in the global network, col. 10, line 53-54) for the gateway (col. 4, line 38), and convert the collected call billing data from the first data structure format to a second data structure format (data structure format of the second destination, col. 10, line 55 to col. 11, line 10) Besides, Brouckman has considered the second format for sending different entities around the world after the call record conversion (abstract, claim 1).

In the above, it does not clearly indicate the transmit the call billing data in the second format to data network for processing the settlement with internet and the local exchange carrier, Heindel teaches the distributed billing system with the gateway interfacing biller and the service center (title, abstract, Fig. 1-3; col. 1, lines 6-10; col. 55 to col. 4, line 19). The system comprises the Biller Integrated Systems BIS 34(1)-34(M) connected to respective biller systems 22(1)-22(m) using the translator 38(1)-38(M) to convert the different biller data formats into the format that could be accepted by internet data network 30 (abstract, col. 2, lines 42-48; col. 4, lines 20-30). The billing statement is distributed or email to consumers of banks from internet network 32 (col. 5, lines 56-61; col. 6, lines 1-6). Thus, the second translated format from BIS is transmitted to internet data network 30 for processing by the co-carrier at the system service center 24. Heindel's BIS gateway 80, service center gateway 86, payment gateways 84, 90, are performing the incumbent local exchange interface to different biller system 22(1)-(M). Heindel teaches the biller integrated system having the call billing data translator to translate the different format from each biller to the acceptable format via internet data network to the center service system for processing the billing data, such that the system could efficiently translate the billing data format to center service system for processing, as shown by Heindel. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Brouckman, and to include Heindel's biller integrated system having translator transmitting different format for each biller via internet data network to the center service system for billing data processing, such

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that the system could efficiently translate the billing data format to center service system for processing.

In the above it is not clearly indicate the billing processing by a carrier access billing system for settlement with the internet service provider.

Walker et al. (also as Walker in below) teaches the billing collection system of the computer user for accessing information, services, provided by servers in the internet, Web, 900 network (abstract, figure in cover page, Fig. 2, Fig. 6, Fig. 15; col. 1, lines 8-21; col. 4, lines 1-8; col. 8, lines 1-3). The 900 number is for the user to access internet web service (col. 2, line 39-44) for information or service or goods (col. 1, line 9-10). The user's billing information is collected and transfer to local exchange carrier LEC and the LEC distributes the phone bill to user for user's payment (col. 7, line 41-50; col. 9, line 65 to col. 15). Hence, Walker teaches the collecting/processing of the user's internet phone bill for the internet service provider.

Ganesan et al. (also as Ganesan in below) teaches the distributed data processing techniques for processing bill (abstract) including phone bill 148 (Fig. 18). Ganesan considers the billing entity 56 and billing aggregator 94 for collecting and procession phone bill (Fig. 7, Fig. 13b). As shown in col. 14, lines 16-34, col. 17, lines 3-20. Ganesan teaches the billing entity 56 processes partner's messages to/from an established-billing-aggregator partner (co-carrier). Such co-carrier-partnership is required if a large group of subscribers are using the billing aggregator 94, for collecting all of their bills via billing aggregator 94. The billing aggregator 94 is treated as a proxy for the billers that it represent. Hence, Ganesan teaches the co-carrier

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billing aggregator 94 for processing the phone bill for the partnership with billing entity 56, proxy for the billers. Walk teaches the collecting/processing of the user's internet phone bill for the internet service provider, and Ganesan teaches the carrier partnership with the billing entity, such that the system could be upgraded for processing billing information for the service provided by the internet servers using the co-carrier partnership. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Brouckman above, and to include Walker's collecting/processing of the user's internet phone bill for the internet service provider, and Ganesan's co-carrier partnership with the billing entity, to Brouckman as modified above, such that the system could be upgraded for the internet service's billing collection via the partnership.

Regarding to the local exchange carrier, the incumbent local exchange carrier, referring to Brouckman (the call conversion process of the call event records, there are incumbent local exchange carrier in the local gateway 110, PSTN 125 in Fig. 1 for providing the call routing service using location area codes LAC in col. 3, lines 1-17 and the gateway 110 has the MSC 310 switch in col. 3, lines 18-23).

Regarding **claim 2**, Brouckman discloses the signaling gateway 110 in Fig. 3, which comprising the signaling elements mobile switching center MSC 310, the gateway management system GMS for providing the administration and maintenance support for each of the gateway subsystem (column 3, line 29-35).

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Regarding **claim 3**, Brouckman discloses the coupling to the gateway in his interface to gateway 110, utilizing the Gateway Business system 420 to service provider system 410, and interfacing to message origination center, and switch 310, of the gateway 110 (figure in the cover figure).

Regarding **claim 4**, Brouckman discloses in the front figure that the Business Support system 430 polling the call detail records CDR from gateway 110 (front figure), and the gateway generate the CDR (col. 4, line 38-40), for operative to poll. Also, referring to Cameron in claim 32 for the polling.

3. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brouckman in view of Heindel, Walker, Ganesan, and further in view of Witzman et al. (US 5,737,399).

In the above it does not include the raw data of the call event records (CERs).

Witzman teach **claim 5**, the first data structure format comprises raw ASG call event records (CERs). See in abstract, Fig. 2A, it shows a network's system architecture having the centralizing storage and verification element. In column 1, line 18-21, in column 3, line 4-12, in column 4, line 63 to column 5, line 4, it shows the captured billing records comprises the call event record (CER). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Witzman's raw ASG to Brouckman as modified above, such the first format could be easily converted to the other secondary structured formats.

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4. Claims 6, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brouckman in view of Heindel, Walker, Ganesan, and further in view of Doherty et al. (US 5,333,184).

In the above, it does not include the AMA format.

Doherty teaches **claim 6**, a data network and transmit the second data structure format to the data network for billing processing. See in abstract, in Fig. 1, it shows the system utilizes the exchange message interface message format, EMI, carrying the primary interexchange carrier indicator for call billing purpose associated with the subscriber. In column 7, line 52-61, column 8, line 5-15, column 9, line 22-31, it shows the system generates the AMA message format for the call, converts said AMA format to the EMI message format, and transmits the EMI message record format to the call rating system. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Doherty's transmitting in the EMI second format to the call rating system, to Brouckman as modified above, such that system could be upgraded and more flexible of handling a second billing data format.

Regarding **claim 7**, the disclosure above in claims 1-4 has shown the claimed features for the data network communicating with the network processor and the receiving of the second data AMA format, although Brouckman et al. discloses the conversion to plurality of CDRs to the format utilized by the destination.

4. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brouckman in view of Heindel, Walker, Ganesan, and further in view of Kay et al. (US 5,575,894).

In the above, it does not include the local traffic system.

Kay teaches **claim 8**, the data network comprises a local traffic system (LTS). See in abstract, Fig. 1-3, and in column 3, line 3-25, it shows a virtual foreign exchange service system having at least one interoffice trunk carries communication traffic between the local exchange central office switched system and the foreign exchange central office switching system for billing purpose having the selective procedures. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Kay et al.'s local exchange central office of the local call traffic to Brouckman as modified above, such that the local billing data could be easily collected by the local exchange central office. Regarding the second data structure format, AMA format. Refer to the above disclosure discussion in claims, 1-4.

Regarding **claim 9**, Brouckman discloses the network platform in col. 7, line 60-64, the Service provider net system 524 is a personal computer with software to access Web, Internet, for the processor network platform.

Regarding **claim 10**, the claimed features are covered by the disclosed patents shown above in claims 1-4. Therefore, it is rejected for the same rationale, for the interfacing the signaling network (Fig. 3), the internet service provider.

5. Claims 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brouckman in view of Heindel, Walker, Ganesan, and further in view of Herbert (US 5,333,183).

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In the above, it does not clearly indicate the periodically receiving of the billing data.

Herbert teaches **claim 11**, the data network is operative to periodically receive the collected call billing data in the second data format (see in column 11, line 67 to column 12, line 47, and in column 28, line 22-31, it shows processor is periodically checks the statistics of the call message-detail-record MDR data records for billing purpose). Regarding data-network, refer to the disclosure in claim 1 above.

Herbert teaches **claim 13**, the network processor polls the gateway at preset interval (see in column 28, line 22-31, and in table 1, it shows the schedules for periodically running the processes to invoke the administrative processor interface APIF for collecting the message processing). Also, see claim 16, 35, as taught by Herbert. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Herbert's scheduled periodically polling of the APIF for collecting call records, to Brouckman, such that the billing collection could update the records according to the different time of the days. Referring to claim 32, 33 below for the polling from Cameron.

In the above, it does not include the AMA code 625 format.

Herbert teaches **claim 15**, the data network comprises a local traffic system (LTS), and wherein the received call billing data in the second data structure format comprises an industry standard automatic message accounting (AMA) structure code 625 format that is used to implement billing processing (the AMA code 652, in Table 7, it shows the structured AMA code 625 format is utilized in the MDR data record system).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Herbert's AMA code 625 format to Brouckman et al., such that the second structure format could be specified as the AMA code 625 format.

Regarding **claim 12**, referring to examiner's comment in claim 4 above for the claimed features for this claim. Referring to Cameron below in claim 32 for the polling.

Regarding **claim 14**, referring to examiner's comment in claim 11 above for the claimed features for this claim.

Regarding **claim 16**, referring to examiner's comment in claim 3 above for the claimed features for this claim.

6. Claims 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brouckman in view of Heindel, Walker, Ganesan, and further in view of Liu et al. (US 5,898,780) and Wang (US 5,991,746).

In the above, it does not include the first and second computers.

Liu teaches **claim 17**, the providing a first computer device, a second computer device, and a communication link, the first computer device communicating with the network and the second computer device communicating with the first computer device via the communication. See in Fig. 1, in abstract, in column 2, line 38-65, the sever software computer 42 of the billing module system 38 is in communication with the server computer 14 and remote computer 26 for collecting billing records. In column 1, line 9-25, it shows the Internet Service Provider ISP. Liu et al. teaches the collecting call billing data with the first

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computer device in a first data structure format (See in Fig. 1, and Fig. 3, it shows the local network ISP 63 having billing system 38, and ISP 64 having the billing system 69 are collecting call billing data). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Liu 's billing system module with computer server for local ISP to Brouckman as modified above, such that the billing system could collect and process the billing records from the internet.

In the above, it does not include the data communications (comm) protocol.

Wang teaches the transferring the call billing data using a data comm protocol... computer device. See in abstract, it shows the data transferring protocol, TFTP protocol, is utilized for the billing data collector. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Wang's TFTP data transferring comm protocol to Brouckman et al. as modified above, such that the transferring of the billing data could be according to the protocol specified in the TFTP data comm protocol.

Regarding the converting the call billing data with the second computer device from the first data structure to a second data structure format, Brouckman discloses the conversion of plurality of call event records for destination in the world, and the oprative ot carry user calls, the first computer device interfacing the signaling network and internet service.

Regarding **claims 18,19, 23**, the claimed features are covered by the disclosed patents shown in claim 17 above. Therefore, it is rejected for the same rationale.

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Regarding **claims 20, 21, 22**, the claimed features are covered by the disclosed patents shown in claims 1, 3 above which also provides the disclosed features for claims 20-22, for the transferring billing data with transfer protocol, TCP, the over the world communication link, the gateway interfacing and internet service provider.

7. Claims 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brouckman in view of Heindel, Walker, Ganesan, and further in view of Jaiswal et al. (US 6,002,754).

In the above, it does not include the invoice.

Jaiswal teaches **claim 24**, the generating an invoice format for data network for delivery to individual users. See in column 4, line 40-54, it shows the format processor sends billing data, invoice, to customer supplied billing system 60. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Jaiswal et al.'s billing data invoice to Brouckman et al., such that the user could directly receive the billing invoice information.

Regarding **claim 25**, referring to the disclosures in claim 3 above.

Regarding **claim 26**, the claimed features are covered by the disclosed patents shown in claims 1, 3, 4 above for the transferring the call billing data.

8. Claims 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brouckman in view of Heindel, Walker, Ganesan, and further in view of Witzman et al. (US 5,737,399).

In the above, it does not include the generating of the alarm signal.

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Witzman et al. teach **claim 27**, the generating an alarm signal with the network processor.

See in column 2, line 31-55, in column 3, line 13-19, in column 12, line 47-6, it shows the alarm signal is generated according to the collected data from NIC and the corresponding data stored in the network database. Also, Herbert shows the alarm display and alarm report in Fig 19. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Witzman's alarm generating of the network information concentrator (NIC) to Brouckman, such that the errors in the billing data collection system could be detected from displayed the alarms.

Regarding **claims 28, 29, 30, 31**, refereeing to examiner's comment in claim 1 above for the incumbent local exchange carrier for the apparatus, system, and methods.

9. Claims 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brouckman, in view of Heindel, Walker, Ganesan, and further in view of Cameron et al. (US 6,317,490 B1) and Cauffman et al. (US 5,325,290).

Regarding **claim 32**, Cameron teaches the network processor is further operative to access a directory in telecomm. network of the call event record associated with call billing data in the first structure within the gateway (as shown in abstract, figure in cover page, summary of invention).

Cameron teaches the billing administrators for access billing information in a telecomm. system (title, abstract, figure in cover page), the system has telecommunication networks, administration interface, and the user interface, for authorization from telecomm. network 12,

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via network interface 500, as the gateway. Cameron teaches the co-carrier as shown in col. 2, line 61 to col. 3, line 22), as the inter-exchange carrier, local-exchange carrier.

Cameron teaches the polling gateway to collect billing data of calls, for generating an output file representing the call billing data. Because Cameron teaches the network interface coupled to a telecommunications network, the network interface permitting the billing administrator to poll the telecomm. network for access for billing information data from repository (col. 7, lines 16-44; col. 7, lines 37-44; col. 9, lines 51-58; col. 9, line 24 to col. 10, line 9). Cameron teaches the network interface for placing request for real time updating billing information from telecomm. network, such that billing administrator can track the billing information by accessing real time billing information (col. 1, lines 18-37).

Cauffman teaches the second data structure include header/trailer, and the second data structure having default values, counter block sequence number in header/trailer. Because Cauffman teaches record index, block count, row length, pointers for billing records, as shown in Fig. 39-43, col. 33, line 12 to col. 34, line 12; col., 40, line 41 to col. 41, line 19), for the pointer to 4th CDR in Fig. 42; the record 1 in CDR index in Fig. 43; the block six, low length L2, Begin Ptr B1/B2, the End Ptr E1/E2 in Fig. 46, as the block counter sequence number in the header/trailer. Cauffman teaches the for the reprocessing the billing records with indices for enabling rapid sorting (abstract), such the billing process could be efficient. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Brouckman, and to include Cameron's real time polling of the call billing data via network interface, and Cauffman's output file having record index, block count, row

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length and pointers for billing records, such that the billing information could be processed efficiently.

Regarding **claim 33**, referring to Cauffman for the counter of block sequence in Cauffman's Fig. 46, for the default value of the header/trailer field respectively, to specify the first and last block in the output file.

Regarding **claim 34**, referring to claim 32 above for the method for the claimed features.

Regarding **claim 35**, referring to claim 33 above for the method for the claimed features.

***Response to Arguments
and
Conclusion***

10. Applicant's arguments with respect to claims 1-4, 6-35 have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicant's arguments based on the no teachings for: co-carrier for accessing billing; network processor for polling gateway to collect call billing data; the second data structure having default values, counter block sequence number, in header/trailer; the ground of rejection has been changed to include Cameron et al. (US 6,317,490 B1) and Cauffman et al. (US 5,325,290).

Regarding co-carrier for accessing billing, Cameron teaches the billing administrators for access billing information in a telecomm. system (title, abstract, figure in cover page), the system has telecommunication networks, administration interface, and the user interface, for authorization from telecomm. network 12, via network interface 500, as the gateway.

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Cameron teaches the co-carrier as shown in col. 2, line 61 to col. 3, line 22), as the inter-exchange carrier, local-exchange carrier.

Regarding the network processor for polling gateway to collect billing data of the calls, for generating output file, Cameron teaches the network interface coupled to a telecommunications network, the network interface permitting the billing administrator to poll the telecomm. network for access for billing information data from repository (col. 7, lines 16-44; col. 7, lines 37-44; col. 9, lines 51-58; col. 9, line 24 to col. 10, line 9). Cameron teaches the network interface for placing request for real time updating billing information from telecomm. network, such that billing administrator can track the billing information by accessing real time billing information (col. 1, lines 18-37).

Regarding the second data structure having default values, counter block sequence number, in header/trailer, Cauffman et al. (also as Cauffman in below) teaches record index, block count, row length, pointers for billing records, as shown in Fig. 39-43, col. 33, line 12 to col. 34, line 12; col. 40, line 41 to col. 41, line 19), for the pointer to 4th CDR in Fig. 42; the record 1 in CDR index in Fig. 43; the block six, low length L2, Begin Ptr B1/B2, the End Ptr E1/E2 in Fig. 46, as the block counter sequence number in the header/trailer. Cauffman teaches the for the reprocessing the billing records with indices for enabling rapid sorting (abstract), such the billing process could be efficient.

In view of the above disclosures, claims 1-4, 6-35, are remaining in the rejection manner.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703)-305-4385.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Charles Chow

June 30, 2003.